

REMARKS

Reconsideration of this application is respectfully requested.

The specification was objected to on the ground that it did not include an abstract of the disclosure. An abstract on a separate sheet is filed herewith.

Claims 1-25 were rejected under 35 U.S.C. §112, first paragraph, because independent claims 1 and 19 were alleged to be single means claims. This ground for rejection has been obviated by the amendment of claims 1 and 19. Specifically, the claims have been amended to recite "means suitable to reposition correctly the film in regard of the heat-sealed jaws when the sensor detects a default in the position of the tape, so as to eliminate drift due to the elasticity of the film." Accordingly, Applicant courteously submits that the rejection made be withdrawn.

The Examiner rejected claims 1-24 under 35 U.S.C §112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter that Applicant regards as his invention. This ground for rejection is respectfully traversed, and reconsideration is respectfully requested.

All of the Examiner's grounds for rejection were related to the language used in the original claims. All of the terms found to be objectionable have been omitted by amendment of the claims. Accordingly, Applicant respectfully submits that the rejection may be withdrawn.

The Examiner rejects the claims as not new and/or obvious in view of the Talbott U.S. 4,745,731 and JP 11 165 362. Applicant respectfully traverses the rejection for the following reasons.

The invention relates to an apparatus and a method for forming reclosable bags by means of a continuously traveling film fitted with at least one tape (60) having an opening/closing function. According to the invention, a sensor is placed in a predetermined position relative to a set of heat-sealed jaws suitable for cyclically closing the film transversely. More precisely, according to the invention, the sensor is adapted to detect if the tape is present or not on the film. As indicated in amended claim 1, the film may be repositioned correctly in regard of the heat-sealed jaws when the sensor detects a default in the position of the tape so as to eliminate drift due to the elasticity of the film.

Talbott U.S. 4,745,731

Talbott relates to an apparatus and a method for forming reclosable storage containers. According to Talbott, the form-fill-seal apparatus includes an unwind stand 12, a fill assembly 13, a horizontal sealing and serving assembly 14, and a bag-into-box insertion assembly 15. The apparatus also includes an engagement assembly 16 and a web spreading assembly 17.

The device controls the positioning of the unwound web so that the edges thereof are precisely positioned with respect to the filling assembly 13. In this manner, mating flexible closure strips 22 and 23, to the extent that they are precisely positioned with respect to the respective edges of the sheeting 18, are also precisely aligned when they engage the fill assembly 13.

Forming collar 28 includes downwardly directed extensions 30, which oppose one another in order to provide a gradually tapering slot that provides added guidance

for the free edges of the film material sheeting 18 and for the flexible closure strips 22 and 23 while still providing adequate flexibility of sheeting movement that aids in achieving the mating of the flexible closure strips 22 and 23.

Engagement assembly 16 preferably includes at least one pair of pinch rollers 33. The opposing edges of the film material sheeting, by the time the flow thereof reaches the engagement assembly 16, are aligned in juxtaposition such that the mating flexible closure strips 22 and 23 into and through the engagement assembly 16, some freedom of movement of the strips 22 and 23 is allowed by the assembly so as to permit the strips 22 and 23 to slide into complete alignment with each other until their respective interlocking profiles fully and securely engage and interlock.

Pinch rollers 33 typically may include an annular groove 34, which functions to both accommodate and guide the mating flexible closure strips 22 and 23, which typically have a thickness that is significantly greater than that of the body of the film material sheeting 18.

In order to check that the pinch rollers 33 have adequately interengaged the mating flexible closure strips 22 and 23, a detector device 35 is preferably positioned between the pinch rollers 33 and the guiding assembly 38. For best results, however, the detector device 35 is preferably positioned generally immediately upstream of the guiding assembly 38. A suitable detector device 35 is an air detector of known construction which, through pressure differential readings, can signal the operator or the control mechanism of the apparatus that unsatisfactory interengagement has occurred in order that appropriate corrective measures can be taken. (Col 4, lines 57-68.)

So clearly, Talbott detects the interengagement of the closure strips. The apparatus of the invention does not detect the interengagement of the closure strips. The apparatus of the invention detects the presence of the closure strips.

JP 11 165 362

The disclosure of JP 11 165 362 is very similar to Talbott. Indeed, JP 11 165 362 relates to a fastener intermeshing detector for packaging bag with fastener. The aim of this document is to propose means for rapidly stopping the travel of a cylindrical body when a smooth intermeshing operation fails. The prior art document discloses a detector suitable to slide into contact with the fastener. The detector issues a "default" signal when the detector detects an augmented change level of the thickness corresponding to a not intermeshing state. The detector issues an "ok" signal in the other cases. So, similar to Talbott, JP 11 165 362 clearly detects the interengagement of the closure strips.

The apparatus of the invention does not detect the interengagement of the closure strips. The apparatus of the invention detects the presence of the closure strips.

It appears clearly that neither Talbott nor JP 11 165 362 anticipate the invention. Indeed both Talbott and JP 11 165 362 relate to detection of correct intermeshing of two closure strips of a fastener. Both Talbott and JP 11 165 362 issue a "default" signal when the detector detects an augmented change level of thickness corresponding to a not-intermeshing state. And both Talbott and JP 11 165 362 issue an OK signal in all cases where the detected thickness is not above a threshold. In other words Talbott

and JP 11 165 362 issue an OK signal when the tape is not present on the film. Indeed Talbott and JP 11 165 362 do not distinguish between cases in which 1) the tape is present and correctly intermeshed and 2) the tape is not present. Moreover neither Talbott nor JP 11 165 362 teaches or suggests to reposition the film in view of heat-sealed jaws, if a default in the position of a closure tape provided on the film is detected.

In contrast, the detector of the invention is adapted to detect if the tape is present or not. An "OK" signal is generated when the tape is present. A "default" signal is generated when the tape is not present.

Since neither Talbott nor the JP reference teaches or suggests a detector suitable for detecting if a tape is present or not, clearly the combination of Talbott and the JP reference can no more lead to the invention. Moreover, neither Talbott nor the JP reference teaches or suggests to reposition a film in regard of heat-sealed jaws when a sensor detects a default in the position of a closure tape. Consequently, the combination of Talbott and the JP reference does not lead to the invention. Reconsideration and withdrawal of the rejection are respectfully requested.

If there is any fee due in connection with the filing of this Preliminary Amendment, please charge the fee to our Deposit Account No. 06-0916.

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Respectfully submitted,

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Dated: June 3, 2003

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Appendix to the Amendment of June 3, 2003

Please enter the following amendments.

IN THE CLAIMS

1. (Twice Amended) An apparatus for forming reclosable bags [comprising] wherein said bags are formed from a continuously traveling film (12) fitted with at least one closure tape (60) [with an opening/closing function that is placed on the film (12)], wherein the apparatus comprises a set of heat-sealed jaws (30) provided transversely relative to the travel direction of the film (12), at least one sensor (100) that detects [the presence of] if the tape (60) [when the tape (60) is] is present or not on the film in a predetermined position relative to said heat-sealed jaws, [means (30) for treating the film cyclically in order to form bags], and means suitable to reposition correctly the film in regard of the heat-sealed jaws when the sensor detects a default in the position of the tape, so as to eliminate drift due to the elasticity of the film.

2. (Twice amended) The apparatus as claimed in claim 1, wherein the sensor (100) is formed by a mechanical feeler having a pusher (102) associated with an electrical sensor (104).

6. (Twice amended) The apparatus as claimed in claim 1, further comprising means (16) for shaping the film into a tubular [state,] bag blank and means (18) suitable for filing the tubular bag blank [formed in this way, and means (30) suitable for closing the bag on the packaged product] before applying said film to said heat-sealed jaws.

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11. (Twice amended) The apparatus as claimed in claim 1, wherein the closure tape (60) [has an opening/closing function comprises] is chosen in the group comprising complementary closure strips, tear/cut tapes, adhesive tapes, [or] metal tapes for closing by folding.

19. (Twice amended) A method of forming packaging reclosable bags using a continuously traveling film fitted with at least one closure tape (60) [having an opening/closing function placed on the film], wherein the method comprises the steps of cyclically sealing the film with a set of heat-sealed jaws (30) provided transversely relative to the travel direction of the film (12), detecting the presence of the tape (60) [having the opening/closing function] by means of at least one sensor (100) in a predetermined position relative to said heat-sealed jaws [the means (30) for cyclically processing the film in order to form a bag] , and repositioning correctly the film in regard of the heat-sealed jaws when the sensor detects a default in the position of the tape, so as to eliminate drift due to the elasticity of the film.

ABSTRACT

An apparatus for forming reclosable bags, wherein said bags are formed from a continuously traveling film (12) fitted with at least one closure tape (60), wherein the apparatus comprises a set of heat-sealed jaws (30) provided transversely relative to the travel direction of the film (12), at least one sensor (100) that detects if the tape (60) is present or not on the film in a predetermined position relative to said heat-sealed jaws, and means suitable to reposition correctly the film in regard of the heat-sealed jaws when the sensor detects a default in the position of the tape, so as to eliminate drift due to the elasticity of the film.

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